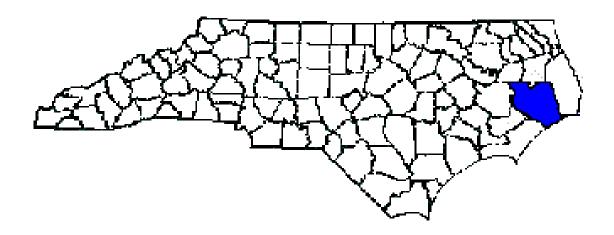
### **ANNUAL REPORT FOR 2009**



Kitty Creek & Wallace Canal Hyde County TIP No. B-3348 CAMA permit No. 100-04



Prepared By:
Natural Environment Unit & Roadside Environmental Unit
North Carolina Department of Transportation
August 2009

### TABLE OF CONTENTS

SUM	SUMMARY			
1.0	Intro .1 .2 .3	duction Project Description Purpose Project History	2 2	
2.0	Vegetation:		3	
	.1 .2 .3 .4	Success Criteria  Description of Species  Results of Vegetation Monitoring  Conclusions	3 3	
3.0	Overall Conclusions and Recommendations		3	
		FIGURES		
Figure	e 1 – S	Site Location Map	4	

**APPENDICES** 

Appendix A – Site Photos

#### SUMMARY

The Kitty Creek & Wallace Canal Mitigation Site (B-3348) is located in Hyde County. The site was planted in May 2008 and was designed as wetland mitigation for impacts associated with bridge project B-3348.

The North Carolina Department of Transportation (NCDOT) will mitigate the project impacts by restoring 0.26 acres of wetlands associated with the causeway removal and bridge replacement for this project. Approximately 0.64 acres of wetlands will be restored at this project location with 0.26 acres being utilized for this project and another 0.14 acres being utilized for TIP No. B-3349 (Action I.D. #200411264). The restoration area was re-vegetated with native brackish marsh plant species. Hydrologic monitoring is not required for this project; however vegetation monitoring is required for five years.

After the second year of monitoring, the Kitty Creek & Wallace Canal Mitigation Site shows by visual observation that the restoration area is re-attaining wetland jurisdictional status and marsh species planted in the wetland restoration area are surviving in the planted areas.

NCDOT proposes to continue vegetation monitoring at the Kitty Creek & Wallace Canal Mitigation Site.

#### 1.0 INTRODUCTION

#### 1.1 Project Description

The Kitty Creek & Wallace Canal Mitigation Site is located at Bridge No's. 52 and 54 on US 264 over Kitty Creek and Wallace Canal (Figure 1). The site consists of approximately 0.64 acres of mitigation.

#### 1.2 Purpose

In order for a mitigation site to be considered successful, the site must meet visual success criteria for five years. This report details the second visual monitoring in 2009 at the Kitty Creek & Wallace Canal Mitigation Site. Hydrologic monitoring was not required for the site.

#### 1.3 Project History

April 2008	Phragmites Treated
May 2008	Site Planted
July 2008	Visual Monitoring (1 year)
August 2009	Phragmites Treated
August 2009	Visual Monitoring (2 year)

## 2.0 VEGETATION: KITTY CREEK & WALLACE CANAL MITIGATION SITE (YEAR 2 MONITORING)

#### 2.1 Success Criteria

NCDOT shall monitor the restoration site by visual observation and photo points for survival. The site success will be evaluated to assess whether at least 75% of the area is covered with the target vegetation. NCDOT shall monitor the site for five years or until the site is deemed successful. Monitoring will be initiated upon completion of the site planting.

#### 2.2 Description of Species

The following tree species were planted in the Wetland Restoration area:

Juncus roemerianus, Black Needlerush Spartina patens, Salt Meadow Cordgrass Spartina cynosuroides, Big Cordgrass

#### 2.3 Results of Vegetation Monitoring

The wetland restoration area is re-attaining jurisdictional status and the planted species are surviving in the planted areas. The planted species have begun to spread throughout the site.

**Site Notes:** Other species noted: cattails, *Scirpus robustus*, *Baccharis* sp., marsh-elder, *Spartina alterniflora*, phragmites, saltgrass, and various other grasses. The phragmites that was noted on site prior to the site being planted was treated on April 18, 2008. The phragmites that was noted during the August 2009 monitoring evaluation was treated on August 25, 2009.

#### 2.4 Conclusions

There were approximately 0.64 acres total of wetland restoration on site. There were no plots established on the site. By visual observation, the Kitty Creek & Wallace Canal Mitigation Site shows that the planted species are surviving in the planted areas and that the restoration area is re-attaining wetland jurisdictional status.

#### 3.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

NCDOT proposes to continue vegetation monitoring at the Kitty Creek & Wallace Canal Mitigation Site.

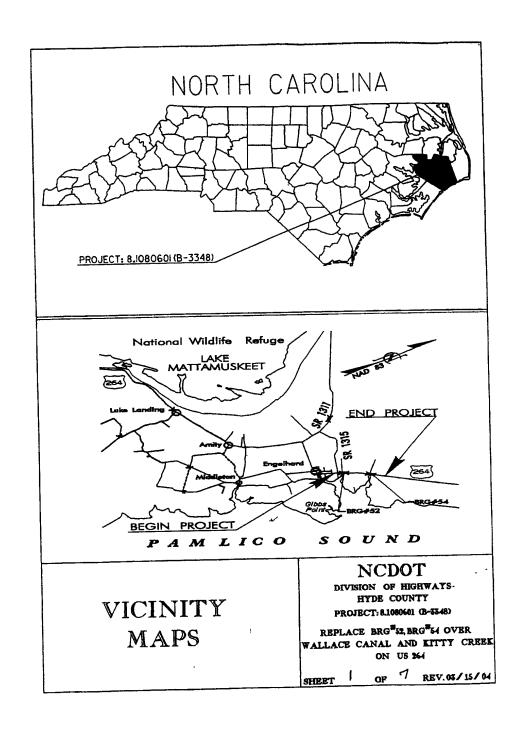


Figure 1 - Site Location Map

# APPENDIX A SITE PHOTOS

# Kitty Creek & Wallace Canal



Photo 1



Photo 3



Photo 5 August 2009



Photo 2



Photo 4



Photo 6

# Kitty Creek & Wallace Canal





oto 7 Photo 8